NEIL ABERCROMBIE
GOVERNOR

GLENN M. OKIMOTO
DIRECTOR

Deputy Directors
FORD N. FUCHIGAMI
JADE BUTAY
RANDY GRUNE
JADINE URASAKI

IN REPLY REFER TO:

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

April 2, 2012

S.B. 3010, S.D.2
RELATING TO TRANSPORTATION

HOUSE COMMITTEE ON FINANCE

The Department of Transportation (DOT) supports the intent of SB 3010, SD2.

This bill will support the DOT in accelerating the construction of approximately ten bridges currently in the design phase, thereby lessening the quantity of deficient bridges before they pose a potential hazard to the public.

Although this bill exempts the DOT from State requirements, it is the intent of the DOT to conform and comply with all State laws during the design and construction phases of each bridge project. Similarly, while this bill will aide the DOT in streamlining the state's project delivery process, the DOT will continue to be required to comply with all applicable Federal laws as this bill does not exempt the DOT from those requirements.

Thank you for the opportunity to provide testimony.

NEIL ABERCROMBIE
GOVERNOR OF HAWAI'I

GARY L. HOOSER
DIRECTOR

STATE OF HAWAI'I
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 S BERETANIA ST. SUITE 702
HONOLULU, HAWAI'I 96813
Tel. (808) 586-4185
Fax. (808) 586-4186
Email: oeqc@doh.hawaii.gov

COMMITTEE ON FINANCE

SB 3010 SD2, RELATING TO TRANSPORTATION

Testimony of Gary Hooser
Director of the Office of Environmental Quality Control

April 2, 2012

Office's Position: Oppose

Fiscal Implications: None

Purpose and Justification: The Office of Environmental Quality opposes this measure which would exempt 10 bridges around the State from complying with 20 chapters of the Hawaii Revised Statutes, enacted to protect the public interest and environmental protections.

Chapter 341, Hawaii Revised Statutes – states unequivocally that "The legislature finds that the quality of the environment is as important to the welfare of the people of Hawaii as is the economy of the State. The legislature further finds that the determination of an optimum balance between economic development and environmental quality deserves the most thoughtful consideration, and...the most intensive care."

The broad-based exempting of projects via statute from all environmental review is contrary in the extreme, to the very basis of the law itself.

Existing law under Chapter 343 already allows for the easy exemption of projects which are minor in nature, or for other reasons, are expected to have no or negligible impacts on the environment.

Almost by definition every bridge on this list is adjacent to sensitive areas, may be historical in nature and depending on the size and scope of the bridge improvements, may have significant impacts on both the immediate and the surrounding area. While the federally required NEPA process often does cover similar areas or review, it does not include cultural impacts and both processes can be done concurrently with no duplication of resources.

Chapter 343, in essence, merely requires a review of the project, and determination as to whether or not there are in fact significant impacts and if not, the project may be exempted. However if there are significant impacts then those impacts must be disclosed and appropriate mitigation suggested. Chapter 343 requires an agency to be accountable and to look closely at decisions impacting sensitive areas and sometimes irreplaceable natural resources.

For these reasons the Office of Environmental Quality Control is opposed to SB 3010, SD2.

Thank you.

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY H. KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

Testimony of
WILLIAM J. AILA, JR
Chairperson

Before the House Committee on
FINANCE

Monday, April 2, 2012
5:00 PM
State Capitol, Conference Room 308

In consideration of
SENATE BILL 3010, SENATE DRAFT 2
RELATING TO TRANSPORTATION.

Senate Bill 3010, Senate Draft 2, proposes to exempt temporarily, the Department of Transportation and its contractors from certain state requirements for certain bridge rehabilitation projects. The Department of Land and Natural Resources' (Department) attention to this bill is limited to the exemptions of state requirements under its purview (1 – 11 in SECTION 2), in particular, Chapters 6E and 174C, Hawaii Revised Statutes (HRS), relating to historic preservation and the State Water Code, respectively. The Department offers the following comments.

Chapter 6E, HRS

Many bridges serve as an excellent example of engineering of a specific time period. The Department would ask that the potentially valuable historical resource aspect of bridges be taken into serious consideration in expediting the alteration of bridges for purposes of efficiency.

Chapter 174C, HRS

Assuming that no permanent diversion of stream water is proposed, the only permit required for bridge rehabilitation and replacement under the State Water Code is a Stream Channel Alteration Permit ("SCAP"). The State Water Code requires SCAPs prior to altering a stream channel in order to understand, and mitigate as appropriate, potential impacts on fisheries, wildlife, recreation, aesthetic, scenic, and other beneficial instream uses. Under the State Water Code, SCAPs must be acted upon within ninety days. Ninety days for action on a permit is reasonable and not excessive.

The State Water Code already exempts the maintenance of existing facilities from SCAPs. If the proposed bridge rehabilitation work is limited to maintaining, repairing, and/or strengthening existing structures, the work may be exempt from a SCAP under Section 174C-71(3)(A), HRS.

However, replacing bridges may entail significant alteration of the stream channel bed and banks and may impose unknown impacts on the stream itself. Across the board exemptions of the entire State Water Code is not appropriate and is not consistent with the State's constitutional duty to protect streams.

Thank you for the opportunity to testify.

NEIL ABERCROMBIE
GOVERNOR
RICHARD C. LIM
DIRECTOR
MARY ALICE EVANS
DEPUTY DIRECTOR
JESSE K. SOUKI
DIRECTOR
OFFICE OF PLANNING

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824

Statement of
JESSE K. SOUKI
Director, Office of Planning
Department of Business, Economic Development, and Tourism
before the
HOUSE COMMITTEE ON FINANCE
Monday, April 2, 2012
5:00 PM
State Capitol, Conference Room 308

in consideration of
SB 3010 SD 2
RELATING TO TRANSPORTATION.

Chair Oshiro, Vice Chair Lee, and Members of the House Committee on Finance.

The Office of Planning (OP) administers Hawaii Revised Statutes (HRS) Chapter 205A, the Coastal Zone Management (CZM) law. SB 3010 SD 2 proposes to exempt the department of transportation and its contractors from a series of state requirements, including HRS Chapter 205A. In particular, the bill proposes to exempt 10 specific bridge projects from the series of state requirements.

Enacted in 1975, the Special Management Area (SMA) Permit is an essential part of the federal and state approved Hawaii CZM Program. SMA permits are only required for development within a narrow band of land along the coast stretching inland from the shoreline and generally to the first state highway. Certain developments are exempt because they have no substantial adverse environmental or ecological or cumulative effects. Developments not in excess of $500,000 require minor permits, which involve an assessment

and no hearing. Developments that exceed $500,000 require a public hearing. A description of the Hawaii CZM Program is attached.

OP opposes this bill for the following reasons:

1) The Hawaii CZM Program was enacted by the state legislature in 1977, and approved by the U.S. Department of Commerce in 1978. The CZM Program balances Hawaii's coastal resource use, economic development and protection of cultural and environmental areas in a sustainable manner so that Hawaii's residents and visitors will continue to benefit from the rich resources the coast and ocean provides. HRS §205A-5 requires that all agencies shall enforce the objectives and policies set forth in HRS §205A-2.

2) The proposed exemptions, including SMA permit exemption, conflict with the intent of HRS Chapter 205A, Part II - SMAs, which was established by the legislature.

3) At the administration's direction, OP is working on an alternative project review processes for state projects within an SMA that are consistent with the federal and state CZM goals and objectives. Recommendations for alternative project review process, in consultation with affected state agencies, will be completed before the next legislative session. The alternative processes to SMA permitting will (a) ensure that both federal grant and federal permitted projects are reviewed in the streamlined federal consistency process; and (b) create a streamlined state review process, with programmatic consistency review for similar project types

(e.g., bridge projects), for state projects within an SMA that are located on state land.

4) SB 3010 SD 2 would jeopardize federal approval of the Hawaii CZM Program, and in turn, the State of Hawaii may lose approximately $2 million of federal funds annually. This loss of federal funding translates to a loss of nine positions at OP, six positions at the planning department of Hawaii County, four positions at the planning department of Kauai County, and four positions at the planning department of Maui County. These positions perform CZM-related activities such as update and implementation of the Ocean Resources Management Plan, federal consistency reviews, coastal non-point pollution control activities, as well as administration of SMA permits and shoreline setback provisions and violation investigations thereof.

Thank you for the opportunity to provide testimony on this measure.

Hawaii CZM Program

Coastal Zone Management
Office of Planning, State of Hawaii

ABOUT THE PROGRAM

Partnering with Hawaii's communities to promote a sustainable coastal environment by building upon our heritage and inspiring island stewardship.

Hawaii 's CZM Program was enacted to provide a common focus for state and county actions dealing with land and water uses and activities. As the State's resource management policy umbrella, it is the guiding perspective for the design and implementation of allowable land and water uses and activities throughout the state.

Unlike single-purpose programs, the Hawaii CZM Program focuses its work on the complex resource management problems of coastal areas in the part of the State that is under the highest stress. Within a framework of cooperation among federal, state and local levels, the Hawaii CZM program employs a wide variety of regulatory and non-regulatory techniques to address coastal issues and uphold environmental law. Among them are stewardship, planning, permitting, education and outreach, technical assistance to local governments and permit applicants, policy development and implementation, and identification of emerging issues and exploration of solutions.

PROGRAM COMPONENTS

FEDERAL CONSISTENCY

The national Coastal Zone Management Act requires derelict federal activities and development projects to be consistent with approved state coastal programs to the maximum extent practicable. Federally-permitted, licensed or assisted activities occurring in, or affective, the state's coastal zone must be in agreement with the Hawaii CZM Program's objectives and policies.

SPECIAL MANAGEMENT AREA (SMA) PERMITS

SMA Permits are management tools to assure that permitted uses and activities that are defined as developments in the SMA are designed and carried out in compliance with the CZM objectives and policies and SMA guidelines. It is independently implemented by each of the four counties according to their respective ordinances and rules.

OCEAN RESOURCES MANAGEMENT PLAN (ORMP)

The ORMP is a statewide plan mandated by Hawaii Revised Statutes ch. 205A. It is based on a three-perspective framework: Connecting Land and Sea; Preserving Our Ocean Heritage; and Promoting Collaboration and Stewardship. The plan builds upon traditional Hawaiian management principles and uses an integrated and area-based approach to natural and cultural resource management.

MARINE AND COASTAL ZONE ADVOCACY COUNCIL (MACZAC)

Composed of twelve advisory members statewide with diverse backgrounds in business, environment, native Hawaiian practices, terrestrial and marine commerce, recreation, research and tourism, MACZAC advises the Director of the Office of Planning on marine and coastal zone management planning, coordination, and facilitation of functions of the Hawaii CZM Program.

PROGRAM FACTS

Coastal Population in 2000:
1,211,537

Miles of Coastline:
1,052

Ocean Economy in 2009:
$5,229,104,120*

CZMA Funds:
2010: $2,065,000 / 2011: $2,018,000

State and Other Matching Funds:
2010: $1,891,000 / 2011: $1,844,000

Total Funds:
2010: $3,956,000 / 2011: $3,862,000

CZM Partners:

Federal: NOAA, EPA, USACE, USN, USCG, USFWS, NMFS, HIHWNMS, PICCC, PacIS, WPFMC

State/County: DBEDT, DOA, DOD, DOH, DLNR, DOT, OHA, HCDA, LUC, OEQC, OMPO, MACZAC, UH-SOEST, Sea Grant, the City and County of Honolulu, County of Kauai, County of Maui, County of Hawaii

Others: The Nature Conservancy

Federally Funded Hawaii CZM Program Staff: Office of Planning: 8, Hawaii County: 6, Kauai County: 4, Maui County: 4

* Based on available data provided by The National Ocean Economics Program, http://noep.mbari.org. * All figures as of January 20, 2012

KEY ACCOMPLISHMENTS

- ORMP Policy and Working Group collaborated with the Sea Grant Hawaii, Center for Island Climate Adaptation (ICAP) to finalize *A Framework for Climate Change Adaptation in Hawaii*. The framework lays out a proposed step-by-step process for the State to develop plans and make informed decisions on climate change adaptation.
- Collaborated with the State Department of Health in the development of a Watershed Planning Guidance to promote the application of Coastal Nonpoint Pollution Control Program (CNPCP) management measures from the broader concept of watershed planning.
- Implemented CNPCP management measures for urban pollution prevention by funding a collaborate effort between the National NEMO Network and local partners to design and conduct a community workshop on low impact development and tools to reduce nonpoint source pollution.
- Funded hurricane wind speed studies and customized design standards which were incorporated into the State Building Code and adopted in 2010.
- Funded a partnership project between the County of Hawaii and community group Ka Ohana O Honuapo to develop an integrated habitat restoration plan for Honuapo estuary as a vital part of the broader resource management plan for the part and implementation of the CNPCP management measures for wetlands, riparian areas, and vegetated treatment systems.
- Provided funding towards technical support needed for certification of the Kawainui Marsh Levee. The levee protects the immediate Coconut Grove residential area of 1,425 housing units and the Greater Kailua area against flood events while perpetuating the 830 acre Kawainui Marsh as a wetland.
- Partnered with the Hawaii Community Development Authority (HCDA) to fund a collaborative planning process for the Mahuahua Ai o Hoi project, which will restore the Heeia wetlands and reduce nonpoint source pollution at the shoreline, and return the lands to productivity by clearing alien vegetation, repairing environmental damage to the land and water, restoring taro fields, and develop economic opportunities such as selling of agricultural crops grown on the land.

FUTURE INITIATIVES

Since establishment in 1978, the Hawaii CZM Program has undertaken a number of initiatives in a variety of areas related to the coastal zone. Most recently, the program is involved in the following initiatives:

ADAPTING TO CLIMATE CHANGE

The Office of Planning, Hawaii CZM Program through its ORMP Policy and Working Groups, and other stakeholders development a statewide climate change adaptation policy to be included as a Priority Guideline in Part III of the Hawaii State Planning Act (Hawaii Revised Statutes ch. 226). The Hawaii CZM Program is also partnering with ICAP and the USACE, Honolulu District to develop an adaptation planning process bringing together outreach and social marketing and technical analysis.

OCEAN RESOURCES MANAGEMENT PLAN (ORMP) UPDATE

The Hawaii CZM Program will be updating its Ocean Resource Management Plan in 2012-2013. The update will involve obtaining input from various stakeholders, including the public, on the current plan, with a goal to develop a revised plan that is functional in nature. Coordination will also be made with other ocean and coastal area stakeholders that are also updating their respective plans.

NATIONAL OCEAN POLICY

The Hawaii CZM Program was awarded a $250,000 grant to develop the Hawaii Sub-regional Ocean Partnership in a manner that fosters meaningful engagement of partners and the public in order to ensure successful implementation of the priorities of the updated ORMP. The Office of Planning is also a partner in the grant awarded to the University of Hawaii's Social Science Research Institute (SSRI) on behalf of the U.S. Territories in the Pacific (American Samoa, Commonwealth of the Northern Marianas Islands (CNMI), Guam), and Hawaii. This grant will develop and establish the Pacific Regional Ocean Partnership.

The Office of Planning and Hawaii CZM Program will also continue to implement objectives of the National Ocean Policy through its existing ORMP, and examine new initiatives to promote ocean spatial planning.

Hawaii CZM Program
Coastal Zone Management

Office of Planning
State of Hawai`i
P.O. Box 2359
Honolulu, Hawai`i 96804-2359
(808) 587-2846

http://hawaii.gov/dbedt/czm
Find us on Facebook
State of Hawaii Office of Planning
@HawOfcPlanning

01/09/2012

OFFICE OF HAWAIIAN AFFAIRS
Legislative Testimony

SB 3010 SD2
RELATING TO TRANSPORTATION
House Committee on Finance

April 2, 2012 5:00 p.m. Room 308

The Office of Hawaiian Affairs (OHA) **OPPOSES** SB 3010 SD2, which would temporarily exempt the Department of Transportation and its contractors from a plethora of state laws and requirements for 10 bridge rehabilitation projects. The exemptions provided for in SB 3010 SD2 are overly broad and may lead to irreversible consequences for Native Hawaiian traditional and customary practices and the resources and environment that Native Hawaiian culture relies upon.

Although OHA understands the need to rehabilitate or replace deficient bridges before they pose a potential hazard to the public, establishing exemptions for these projects sets a bad precedent and undermines important standards developed to protect the public. Specifically, under SB 3010 SD2, these bridge rehabilitation projects would be exempt from the environmental and cultural review requirements of Chapter 343, the land use laws of Chapter 205, the coastal zone management laws of Chapter 205A, the state historic preservation laws of Chapter 6E, and many other requirements for forest reserves, wildlife, natural area reserves, etc. Moreover, bridges are generally located along shorelines and other sensitive areas, and cross rivers that empty into sandy estuaries, which are prime areas for burials and other important cultural resources.

There is a simple and clear process in place to have projects exempted from HRS § 343 if they are expected to have negligible impacts. On the other hand, for those bridge rehabilitation projects that may have a significant impact on the environment and/or Native Hawaiian traditional and customary practices, a review is necessary to determine appropriate mitigation. As this legislature has found, "the past failure to require native Hawaiian cultural impact assessments [has] resulted in the loss and destruction of many important cultural resources and has interfered with the exercise of native Hawaiian culture." *Ka Pa'akai O Ka'aina v. Land Use Commission*, 94 Hawai'i 31, 47, fn 28 (2000). The environmental review process required by HRS § 343 not only ensures consideration of Native Hawaiian traditional and customary practices, but it also provides an opportunity for state agencies to fulfill their legal obligations to protect these rights.

Additionally, the guidelines contained in Chapter 205A are crucial for planning and protecting Hawai'i's special management areas (SMAs). SMA permits also often require that certain environmental impacts be minimized before a project can be approved, including acts that would result in reductions to the size of beaches and have adverse effects on water quality, fisheries, or wildlife habitat. The SMA process is where unique coastal environments are given the attention they deserve. OHA notes that the Office of Planning opposes SB 3010 SD2 and has articulated that it is working on alternative processes for state projects that are consistent with the Coastal Zone Management Program, which may be a more appropriate approach than piecemeal exemptions. OHA also notes the opposition of the Department of Land and Natural Resources, Department of Health, and Office of Environmental Quality Control.

SB 3010 SD2 threatens the protection of constitutionally recognized Native Hawaiian traditional and customary rights and the resources and places practitioners rely upon. Ma ka hana ka 'ike – the knowing is in the doing. The Native Hawaiian community will not thrive without the ability to continue the traditional practices that tie us to the 'āina, each other, and those that came before us. Therefore, OHA respectfully urges the Committee to HOLD SB 3010 SD2. Mahalo for the opportunity to testify on this measure.

Water Resources Research Center
Environmental Center

UNIVERSITY of HAWAI'I® MĀNOA

April 01, 2012
RL: 2296

SB 3010 SD2
RELATING TO TRANSPORTATION

House Committee on Finance
Public Hearing – Monday, April 02, 2012
5:00 p.m., State Capitol, Conference Room 308

By
David Penn, Environmental Center
COMMENTS ONLY

Dear Chair Oshiro, Vice Chair Lee, and committee members,

Senate Bill 3010 would purportedly help the Department of Transportation (DOT) to fast-track the completion of ten bridge rehabilitation and replacement projects statewide. In order to justify legislative approval of the exemptions from state regulatory requirements that are proposed in the bill, we would expect the legislature to carefully examine the trade-offs between the anticipated social benefits of the exemptions and their potential environmental impacts. This process is normally conducted under Hawaii Revised Statutes § 343, and government agencies typically use the results of the § 343 process to decide about their issuance of discretionary approvals and permits under established environmental regulations. The Environmental Center is concerned that the legislature may not have sufficient, site-specific information about the potential environmental impacts and legal consequences of the unregulated construction proposed in the bill to warrant the proposed substitution of the legislature's judgment for that of the non-federal agencies and authorities that routinely oversee these decisions, particularly the Commission on Water Resource Management and the Environmental Council.

The last committee to hear this measure found that limiting the potential environmental impacts of the proposed exemptions to ten specific locations "is a sufficient safeguard" against environmental harm. *See* House Standing Committee Report 1156-12. This raises the premise that 76 legislators and one governor, after roughly three months of legislative deliberation, will

2500 Dole Street, Krauss Annex 19 Honolulu, Hawai'i 96822
Telephone: (808) 956-7361 Fax: (808) 956-3980

each have sufficient knowledge of project-specific conditions at ten locations to assure their constituents that the social good to be achieved by "fast-tracking" each project outweighs the risk of environmental harm involved.

We note that under HRS § 343, DOT already completed a final environmental assessment (FEA) for several of the projects that are named in SB 3010, and used each FEA as the basis for determining that a project would not have a significant impact. In general, such an agency determination of "no significant impact" is premised on an assumption that various regulatory processes identified in the FEA will ensure the continuing insignificance of project-related environmental impacts. It appears that the enactment of SB 3010 would apply retroactively to these determinations, thus reversing the good-faith actions of the DOT in subjecting itself to state environmental regulation, and eroding the public's trust in the safeguards provided by the interplay between the environmental review and permitting processes.

Thank you for considering our testimony on this proposed legislation. Please note that our testimony is advisory only and should not be construed to represent an official institutional position of the University of Hawaii.

Sierra Club
Hawai'i Chapter
PO Box 2577, Honolulu, HI 96803
808.538.6616 hawaii.chapter@sierraclub.org

HOUSE COMMITTEE ON FINANCE

April 2, 2012, 5:00 P.M.
(Testimony is 1 page long)

TESTIMONY IN OPPOSITION TO SB 3010 (SD2)

Aloha Chair Oshior and Members of the Committees:

The Sierra Club of Hawai'i strongly ***opposes*** SB 3010 (SD2). This bill exempts the Department of Transportation from most regulations for the purpose of rebuilding the state's bridges.

First, exempting an agency from health and safety standards -- like clean water and clean air regulations -- is simply poor policy. Bridges are frequently located in sensitive areas. A community should not suffer because government failed to perform.

Second, this measure exempts bridges from Hawaii-unique regulations, such as considering Hawaii's unique culture heritage. These considerations will not be adequately protected under the federal system.

Finally, this measure creates a terrible precedent. If government cannot follow basic regulations to protect health and safety, why should a private developer? Ultimately this creates a slippery slope to the significant detriment of our communities and Hawaii's fragile environment.

Mahalo for the opportunity to testify.

1065 Ahua Street
Honolulu, HI 96819
Phone: 808-833-1681 FAX: 839-4167
Email: info@gcahawaii.org
Website: www.gcahawaii.org

GCA of Hawaii
GENERAL CONTRACTORS ASSOCIATION OF HAWAII
Quality People. Quality Projects.

Uploaded via Capitol Website

April 2, 2012

TO: HONORABLE REPRESENTATIVES MARCUS OSHIRO, CHAIR, MARILYN LEE, VICE CHAIR AND MEMBERS OF THE HOUSE COMMITTEE ON FINANCE

SUBJECT: **SUPPORT OF S.B. 3010, SD2, RELATING TO TRANSPORTATION.** Temporarily exempts DOT and its contractors from certain state requirements for certain bridge rehabilitation projects. (SD2)

HEARING

DATE: Monday, April 2, 2012
TIME: 5:00 p.m.
PLACE: Conference Room 308

Dear Chair Oshiro, Vice Chair M. Lee and Members of the Committee:

The General Contractors Association (GCA) is an organization comprised of over six hundred (600) general contractors, subcontractors, and construction related firms. The GCA was established in 1932 and is celebrating its 80th anniversary this year; GCA remains the largest construction association in the State of Hawaii whose mission is to represent its members in all matters related to the construction industry, while improving the quality of construction and protecting the public interest. GCA is testifying **in support** of S.B. 3010, SD2, Relating to Transportation.

This bill proposes to exempt the Department of Transportation and its contractors from the requirements of select specified statutes for a period of five years to expedite the rehabilitation and renovation of select shovel ready bridges throughout the state. Section 5 of the bill ensures that federal requirements are met.

The GCA **supports** this measure to insure the continued safety of our construction equipment and trucks and the general public who travel over these bridges. The ten enumerated bridges have been identified by the Department of Transportation as structurally deficient or functionally obsolete and thus may present a danger to the public if not remedied. Many of Hawaii's bridges were designed and constructed prior to the development and use of the heavy equipment, trucks and other vehicles that currently must traverse these bridges, thus presently a traffic hazard and potential for accidents to occur.

A recently released report, *"Providing Safe and Efficient Mobility in Hawaii: The Cost to Drivers of Deficient Roads, Highway Congestion and Traffic Crashes,"* analyzes road and bridge conditions, economic development and job creation, roadway safety, and transportation funding in Hawaii. (Report by TRIP, Released March 2012). The report concluded that,

> [N]early half of Hawaii's bridges show significant deterioration or do not meet current design standards. This includes all bridges that are more than 20 feet in length. Furthermore, thirteen percent of Hawaii's bridges (more than 20 feet in length) were rated structurally deficient in 2011. A bridge is structurally deficient if there is significant deterioration of the bridge deck, superstructure or substructure or if the bridge was designed to carry light loads. (Report by TRIP, Released March 2012) *See Report attached.*

This bill would expedite the much need rehabilitation of these old bridges and the exemption used only as necessary.

The GCA supports the passage of this measure and recommends its passage by the committee.

Thank you for the opportunity to present our views on this bill.

PROVIDING SAFE AND EFFICIENT MOBILITY IN HAWAII:

The Cost to Drivers of Deficient Roads, Highway Congestion and Traffic Crashes

MARCH 2012

TRIP
a national transportation research group
202-466-6706
www.tripnet.org

Founded in 1971, TRIP ®, of Washington, DC is a nonprofit organization that researches, evaluates and distributes economic and technical data on surface transportation issues. TRIP is sponsored by insurance companies, equipment manufacturers, distributors and suppliers; businesses involved in highway and transit engineering, construction and finance; labor unions; and organizations concerned with an efficient and safe surface transportation network.

Executive Summary

Transportation is more than just driving on Hawaii's roads and bridges or using public transit. It's about receiving packages in a timely manner, easily grabbing groceries on the way home, or safely traveling to recreational and tourist destinations. Transportation provides the connections that keep businesses up and running. It not only moves people, it makes the movement of goods and services possible and provides the state's residents with a high quality of life. The quality of Hawaii's extensive system of roads, highways and bridges has a significant impact on the level of safety and mobility of the state's residents, visitors and businesses.

As the backbone that supports the Aloha State's economy, Hawaii's transportation system affects each resident every day. It provides for travel to work and school, visits to family and friends, and trips to tourist and recreational attractions. Transportation connects Hawaii businesses with customers and the world. It provides the goods and services people need each day and plays a role in every product manufactured in the state and every customer served by one of the state's businesses.

With a current unemployment rate of 6.5 percent and with the state's population continuing to grow, Hawaii must improve its system of roads, highways, bridges and public transit to foster economic growth and keep businesses in the state. In addition to economic growth, transportation improvements are needed to ensure safe, reliable mobility and a high quality of life for all Hawaiians.

The Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), the current long-range federal surface transportation program, was originally set to expire on Sept. 30, 2009. Following a series of short term extensions, the program now expires March 31, 2012. The level of funding and the provisions of a future federal surface transportation program will have a significant impact on future highway and bridge conditions and safety as well as the level of transit service in Hawaii, which, in turn, will affect the state's ability to keep its residents safe, improve their quality of life and enhance economic development opportunities.

An inadequate transportation system costs Hawaii residents a total of approximately $1.1 billion every year in the form of traffic crashes, additional vehicle operating costs (VOC) and congestion-related delays.

- TRIP has calculated the total statewide cost to Hawaii's residents of driving on roads that are deteriorated, congested and lack some desirable safety features and the average cost per motorist in the Honolulu metro area. The following chart shows the cost breakdowns statewide and for the Honolulu area.

	VOC	Congestion	Safety	TOTAL
Honolulu per driver	$701	$620	$206	**$1,527**
STATEWIDE	$485 million	$350 million	$255 million	**$1.090 billion**

- TRIP estimates that Honolulu roadways that lack some desirable safety features, have inadequate capacity to meet travel demands or have poor pavement conditions cost the region's average motorist $1,527 annually in the form of traffic crashes, additional vehicle operating costs and the cost of lost time and wasted fuel due to traffic congestion.

Population and economic growth in the Aloha State have resulted in increased demands on the state's major roads and highways.

- Hawaii's population reached approximately 1.37 million in 2010, an increase of 24 percent since 1990. The state's population is expected to grow to 1.47 million by 2030.
- Vehicle travel in Hawaii increased 24 percent from 1990 to 2010. Vehicle miles of travel (VMT) jumped from 8.1 billion in 1990 to 10 billion VMT in 2010.
- By 2025, vehicle travel in Hawaii is projected to increase by another 25 percent.
- From 1990 to 2010, Hawaii's gross domestic product, a measure of the state's economic output, increased by 25 percent, when adjusted for inflation.

Nearly two-thirds of Hawaii's major roads are deteriorated. Without additional funding, conditions could worsen in the future. This report contains a list of the 25 sections of roadway in the state that are the most deteriorated and in need of repair or replacement.

- According to the Hawaii Department of Transportation (HDOT), 61 percent of lane miles on major roadways are in poor or mediocre condition. A total of 47 percent of lane miles of major roadways were rated in poor condition and an additional 14 percent were rated in mediocre condition. Seventeen percent of lane miles of major roadways were in fair condition and an additional 22 percent were rated in good condition. These include roads that are maintained by the Hawaii Department of Transportation as well as individual counties.
- Roads rated in poor condition may show signs of deterioration, including rutting, cracks and potholes. In some cases, poor roads can be resurfaced, but often are too deteriorated and must be reconstructed.
- Roads in need of repair cost each Hawaii motorist an average of $549 annually in extra vehicle operating costs – $485 million statewide. Costs include accelerated vehicle depreciation, additional repair costs and increased fuel consumption and tire wear.

- In Honolulu, 62 percent of major roads are in poor condition, the third highest share among cities with a population of 500,000 or more. Driving on roads in need of repair costs each Honolulu motorist an average of $701 each year in the form of accelerated vehicle depreciation, additional repair costs and increased fuel consumption and tire wear. Honolulu's extra vehicle operating cost is the fourth highest in the nation among cities with a population of 500,000 or greater.

- The functional life of Hawaii's roads is greatly affected by the state's ability to perform timely maintenance and upgrades to ensure that structures last as long as possible. It is critical that roads are fixed before they require major repairs because reconstructing roads costs approximately four times more than resurfacing them.

- HDOT has identified the 25 sections of roadway throughout the state that are the most deteriorated and in need of repair or replacement. . The list includes sections of roadway that are at least two miles in length and carry at least 2,500 average daily traffic (ADT). The top ten are listed below, with the full list included in the body of the report.

Rank	Route	Location	Length (Mi.)	ADT
1	Hawaii Belt Road, M.P. 19.00 to Laupahoehoe (Route 19)	Hawaii	5.00	7,236
2	Interstate H-1, Kalihi to Puowaina (Route H-1)	Oahu	2.10	236,200
3	Kamehameha Highway, Pupukea to Kuilima (Route 83)	Oahu	6.02	13,689
4	Akoni Pule Highway, Maulili to Pololu Valley (Route 270)	Hawaii	4.45	2,581
5	Mamalahoa Highway, Napoopoo to Kealakekua (Route 11)	Hawaii	5.62	9,911
6	Hawaii Belt Road, Honomu to M.P. 19.00 (Route 19)	Hawaii	5.75	7,236
7	Kamehameha Highway, Kuilima to Polynesian Cultural Center (Route 83)	Oahu	6.85	12,579
8	Kamehameha Highway, Punaluu to Crouching Lion (Route 83)	Oahu	3.40	9,963
9	Farrington Highway, Dillingham Airfield to Puuiki (Route 930)	Oahu	3.35	6,745
10	Hawaii Belt Road, Hilo to Papaikou (Route 19)	Hawaii	4.54	16,254

Nearly half of Hawaii's bridges show significant deterioration or do not meet current design standards. This includes all bridges that are more than 20 feet in length.

- Thirteen percent of Hawaii's bridges (more than 20 feet in length) were rated structurally deficient in 2011. A bridge is structurally deficient if there is significant deterioration of the bridge deck, superstructure or substructure or if the bridge was designed to carry light loads. Structurally deficient bridges may be closed in some situations, but more often are posted for lower weight limits, which restricts or redirects larger vehicles, including commercial trucks, school buses and emergency services vehicles.

- Thirty-two percent of Hawaii's bridges (more than 20 feet in length) were rated functionally obsolete in 2011. Bridges that are functionally obsolete no longer meet current highway design standards, often because of narrow lanes, inadequate clearances or poor alignment.

- HDOT projects that the current cost to replace or rehabilitate all structurally deficient bridges in the state totals $500 million.

- HDOT has identified the 25 structurally deficient bridges that are most in need of repair or replacement. The top ten bridges are listed below with the full list included in the body of the report.

Rank	Route	Location	Route or feature intersected	ADT	Year Built
1	560	KAUAI	WAIPA STRM	5,555	1912
2	560	KAUAI	WAIKOKO STRM	5,555	1913
3	560	KAUAI	WAIOLI STRM	6,265	1912
4	50	KAUAI	NAWILIWILI STR/LIHUE M	27,145	1936
5	99	OAHU	UP POAMOHO STRM	22,120	1936
6	50	KAUAI	WAHIAWA STRM	14,175	1936
7	0	MAUI	IAO STRM #59	3,000	1955
8	3080	MAUI	STRM(KAHANA-NUI #93)	3,000	1964
9	H1	OAHU	KAPALAMA CANAL	183,925	1938
10	31	MAUI	KULANIHAKOA DITCH #76	1,920	1911

Improving safety features on Hawaii's roads and highways would likely result in a decrease in traffic fatalities in the state. Roadway design may have been a contributing factor in approximately one-third of all fatal and serious traffic crashes.

- Between 2006 and 2010, 628 people were killed in traffic crashes in Hawaii, an average of 126 fatalities per year.
- Hawaii's traffic fatality rate was 1.13 per 100 million vehicle miles of travel in 2010, slightly higher than the national average of 1.11.
- The cost of serious traffic crashes in Hawaii in 2010, in which roadway design may have been a contributing factor, was approximately $255 million. The cost of serious crashes includes lost productivity, lost earnings, medical costs and emergency services.
- In the Honolulu area, where there were 60 traffic fatalities in 2010, traffic crashes in which roadway design may have been a contributing factor cost the average driver approximately $206 per year.
- Several factors are associated with vehicle crashes that result in fatalities, including driver behavior, vehicle characteristics and roadway design. It is estimated that roadway design may be a contributing factor in approximately one-third of fatal traffic crashes.
- Where appropriate, highway improvements can reduce traffic fatalities and accidents while improving traffic flow to help relieve congestion. Such improvements include removing or shielding obstacles; adding or improving medians; adding rumble strips, wider lanes, wider and paved shoulders; upgrading roads from two lanes to four lanes; and better road markings and traffic signals.
- The Federal Highway Administration has found that every $100 million spent on needed highway safety improvements will result in 145 fewer traffic fatalities over a 10-year period.

Commerce and commuting in Hawaii are constrained by growing traffic congestion, which will increase in the future unless additional highway and transit capacity is provided.

- In 2008, 45 percent of the state's urban highways carried a level of traffic likely to result in significant delays during peak travel hours. The statewide cost of lost time and wasted fuel due to congestion is $350 million annually.

- The average rush hour trip in the Honolulu metropolitan area takes approximately eighteen percent longer to complete than during non-rush hour. Congestion related delays cost the average peak-hour driver in Honolulu $620 each year in lost time and wasted fuel.

The efficiency of Hawaii's transportation system, particularly its highways, is critical to the health of the state's economy. Businesses are increasingly reliant on an efficient and reliable transportation system to move products and services. Expenditures on highway repairs create a significant number of jobs.

- The Federal Highway Administration estimates that each dollar spent on road, highway and bridge improvements results in an average benefit of $5.20 in the form of reduced vehicle maintenance costs, reduced delays, reduced fuel consumption, improved safety, reduced road and bridge maintenance costs, and reduced emissions as a result of improved traffic flow.

- Every year, $22 billion in goods are shipped from sites in Hawaii and another $32.4 billion in goods are shipped to sites in Hawaii. Forty-seven percent of the goods shipped annually from sites in Hawaii are carried by trucks and another five percent are carried by parcel, U.S. Postal Service or courier services, which use trucks for part of their deliveries.

- A 2007 analysis by the Federal Highway Administration found that every $1 billion invested in highway construction would support approximately 27,800 jobs, including approximately 9,500 in the construction sector, approximately 4,300 jobs in industries supporting the construction sector, and approximately 14,000 other jobs induced in non-construction related sectors of the economy.

Two 2010 reports, one by the Treasury Department with the Council of Economic Advisers and the other by a bipartisan group of transportation experts, found that the U.S. is falling far behind internationally in providing a modern transportation system and will need to adopt a more ambitious and focused transportation program to maintain the nation's standard of living. The reports call for increased investment to relieve traffic congestion, improve freight and intermodal access, improve road and bridge conditions, improve traffic safety, and reduce emissions.

The reports found that now is an optimal time to invest in infrastructure because of reduced costs due to the economic downturn and that providing adequate resources to modernize the nation's transportation system will require increased use of innovative

funding tools including vehicle-miles-traveled fees, public-private partnerships and capital budgeting.

- The report, *"An Economic Analysis of Infrastructure Investment"* (The Treasury report), was prepared by the U.S. Department of the Treasury with the Council of Economic Advisers.

- The report, *"Well Within Reach: America's New Transportation Agenda"* (The Miller report), was prepared by a group of the nation's top transportation policy experts chaired by former U.S. Secretaries of Transportation, Samuel Skinner and Norman Mineta. The group was assembled by the Miller Center at the University of Virginia to develop solutions for the funding and planning challenges that confront the nation's transportation system.

- The Miller report found that the U.S. faces an annual funding shortfall to maintain conditions and traffic congestion levels on its transportation system from between $134 and $194 billion and from between $189 and $262 billion to improve conditions and reduce traffic congestion.

- The Treasury report found that U.S. infrastructure spending as a percentage of gross domestic product (GDP) has fallen by 50 percent and now accounts for two percent of the nation's GDP. In contrast, China spends about nine percent of its GDP on infrastructure and Europe about five percent.

- The Treasury report found that now is an optimal time to invest in transportation infrastructure because well-designed projects can provide significant, long-term economic benefits, significant needs exist and construction and other costs associated with infrastructure projects are especially low because of high unemployment and a high level of underutilized resources.

Key recommendations of the reports include:

Program format:

- Adopt an integrated approach to transportation planning that includes freight and goods movement and stresses intermodal connectivity (Miller).

- Prioritize projects that provide the greatest returns in terms of future U.S. competitiveness, economic growth and employment (Miller).

- Increase emphasis on urban congestion relief, including adding additional roadway and transit capacity, making the existing system work more efficiently and adopting regional policies that may reduce some travel demand (Miller).

- Improve the delivery of transportation projects by reforming the project planning, permitting and review process to speed actual implementation (Miller).

Funding:

- Establish a National Infrastructure Bank (NIB) that would create conditions for greater private sector co-investment in infrastructure. The NIB would also perform rigorous analysis to identify projects with the greatest possible societal and economic benefits (Treasury).

- Save the public money by investing adequately in transportation to reduce delays, vehicle maintenance costs, traffic crashes and vehicle emissions (Miller).

All data used in the report is the latest available. Sources of information for this report include the Hawaii Department of Transportation (HDOT), the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Treasury Department, the Council of Economic Advisers, the U.S. Census, The Bureau of Transportation Statistics (BTS), the National Highway Traffic Safety Administration (NHTSA), and the Texas Transportation Institute (TTI).

Introduction

Hawaii's roads, highways, bridges and public transit systems form vital transportation links for the state's residents, visitors and businesses, providing daily access to homes, jobs, shopping, tourist destinations and recreation, as well as to agricultural centers and industrial zones.

Today, with the state continuing to experience growth in population and travel, the preservation and modernization of Hawaii's transportation system is crucial to providing safe and efficient mobility, while improving the economic livelihood of the state and accommodating future growth.

As the nation looks to rebound from the recent economic downturn, improving Hawaii's transportation system could play an important role in advancing the state's economic well-being by providing critically needed jobs in the short term and by improving the productivity and competitiveness of the state's businesses in the long term.

This report examines the condition, use and safety of Hawaii's roads, highways and bridges and the future mobility needs of the state.

All data used in the report is the latest available. Sources of information for this study include the Hawaii Department of Transportation (HDOT), Federal Highway Administration (FHWA), the Treasury Department, the Council of Economic Advisers, the U.S. Census, The Bureau of Transportation Statistics (BTS), the National Highway Traffic Safety Administration (NHTSA), and the Texas Transportation Institute (TTI).

Population, Travel and Economic Trends in Hawaii

Hawaii residents and businesses require a high level of personal and commercial mobility. Despite the recent economic downturn, population and economic growth in the Aloha State over the past two decades resulted in a significant increase in the demand for mobility and an increase in vehicle miles of travel (VMT). To foster a high quality of life in Hawaii, it will be critical that the state provide and preserve a safe and modern transportation system that can accommodate future growth in population, vehicle travel and economic development.

Hawaii's population grew 24 percent between 1990 and 2010, increasing from 1.11 million in 1990 to approximately 1.37 million residents in 2010.[1] The population of Hawaii is projected to increase to 1.47 million by 2030.[2]

Hawaii also has experienced moderate economic growth since 1990. From 1990 to 2010, Hawaii's gross domestic product (GDP), a measure of the state's economic output, increased by 25 percent, when adjusted for inflation.[3]

Steady population and economic growth in Hawaii have resulted in increases in vehicle travel in the state. From 1990 to 2010, annual vehicle miles of travel in Hawaii increased 24 percent, from 8.1 billion miles traveled annually to 10 billion miles traveled annually.[4] Based on population and other lifestyle trends, TRIP estimates that travel on Hawaii's roads and highways will increase 25 percent by 2025.[5]

Condition of Hawaii's Roads

The life cycle of Hawaii's roads is greatly affected by the state and local governments' ability to perform timely maintenance and upgrades to ensure that road and highway surfaces last as long as possible. The pavement condition of the state's major roads is evaluated and classified as being in poor, mediocre, fair or good condition.

According to HDOT, a total of 61 percent of lane miles of major roadways are in poor or mediocre condition. Forty-seven percent of lane miles of major roadways were rated in poor condition and an additional 14 percent were rated in mediocre condition.[6] These include roads that are maintained by the Hawaii Department of Transportation as well as individual counties.

Roads rated poor may show signs of deterioration, including rutting, cracks and potholes. In some cases, poor roads can be resurfaced but often are too deteriorated and must be reconstructed. Most pavements in mediocre condition can be repaired by resurfacing, but some may need more extensive reconstruction to return them to good condition. Seventeen percent of lane miles of major roadways were in fair condition and an additional 22 percent were rated in good condition.

Pavement failure is caused by a combination of traffic, moisture and climate. Moisture often works its way into road surfaces and the materials that form the road's foundation. Road surfaces at intersections are even more prone to deterioration because the slow-moving or standing loads occurring at these sites subject the pavement to higher levels of stress. It is critical that roads are fixed before they require major repairs because reconstructing roads costs approximately four times more than resurfacing them.[7]

As Hawaii's roads and highways continue to age, they will reach a point where routine paving and maintenance will not be adequate to keep pavement surfaces in good condition and costly reconstruction of the roadway and its underlying surfaces will become necessary.

Based on information provided by HDOT, TRIP has identified the 25 sections of major roadways in the state that are the most deteriorated and in need of repair or replacement. The list includes sections of roadway that are at least two miles in length and carry at least 2,500 average daily traffic (ADT).

Chart 1. Sections of major Hawaii roadways that are most deteriorated and in need of repair or reconstruction.

Rank	Route	Location	Length (Mi.)	ADT
1	Hawaii Belt Road, M.P. 19.00 to Laupahoehoe (Route 19)	Hawaii	5.00	7,236
2	Interstate H-1, Kalihi to Puowaina (Route H-1)	Oahu	2.10	236,200
3	Kamehameha Highway, Pupukea to Kuilima (Route 83)	Oahu	6.02	13,689
4	Akoni Pule Highway, Maulili to Pololu Valley (Route 270)	Hawaii	4.45	2,581
5	Mamalahoa Highway, Napoopoo to Kealakekua (Route 11)	Hawaii	5.62	9,911
6	Hawaii Belt Road, Honomu to M.P. 19.00 (Route 19)	Hawaii	5.75	7,236
7	Kamehameha Highway, Kuilima to Polynesian Cultural Center (Route 83)	Oahu	6.85	12,579
8	Kamehameha Highway, Punaluu to Crouching Lion (Route 83)	Oahu	3.40	9,963
9	Farrington Highway, Dillingham Airfield to Puuiki (Route 930)	Oahu	3.35	6,745
10	Hawaii Belt Road, Hilo to Papaikou (Route 19)	Hawaii	4.54	16,254
11	Volcano Road, Keeau-Pahoa to Kurtistown (Route 11)	Hawaii	3.44	24,978
12	Kahekili Highway, Kahaluu to Haiku (Route 83)	Oahu	3.10	21,740
13	Interstate H-1, Waiau to Halawa (Route H-1)	Oahu	3.34	233,600
14	Honoapiilani Highway, Maalaea Bay to M.P. 11.70 (Route 30)	Maui	4.10	25,665
15	Mamalahoa Highway, M.P. 90.00 to M.P. 95.00 (Route 11)	Hawaii	4.83	3,670
16	Kamehameha Highway, Joseph P. Leong to Pupukea (Route 83)	Oahu	4.47	17,610
17	Wilikina Drive, Kamananui to Kamehameha Highway (Route 99)	Oahu	2.10	43,000
18	Kuhio Highway, M.P. 18.00 to Kilauea (Route 56)	Kauai	5.90	12,100
19	Farrington Highway, Puuiki to Kamehameha (Route 930)	Oahu	2.42	8,554
20	Hawaii Belt Road, Papaikou to Honomu (Route 19)	Hawaii	6.21	14,400
21	Volcano Road, Glenwood to M.P. 25.00 (Route 11)	Hawaii	5.19	6,300
22	Akoni Pule Highway, M.P. 14.25 to Hawi (Route 270)	Hawaii	5.08	5,849
23	Kamehameha V Highway, M.P. 2.00 to M.P. 7.00 (Route 450)	Molokai	5.00	2,700
24	Nawiliwili Road, M.P. 0.00 to M.P. 2.06 (Route 58)	Kauai	2.06	12,019
25	Volcano Road, M.P. 15.00 to Glenwood (Route 11)	Hawaii	4.84	6,300

Source: Hawaii Department of Transportation response to TRIP survey.

The Costs to Motorists of Roads in Inadequate Condition

TRIP has calculated the additional cost to motorists of driving on roads in poor or unacceptable condition. Roads in poor condition – which may include potholes, rutting or rough surfaces – increase the cost to operate and maintain a vehicle. These additional vehicle operating costs include accelerated vehicle depreciation, additional vehicle repairs, increased fuel consumption and increased tire wear. TRIP estimates that additional vehicle operating costs borne by Hawaii motorists as a result of poor road conditions total $485 million annually, or $549 per motorist.

In Honolulu, 62 percent of major roads are in poor condition, the third highest share in the nation among large cities (500,000+ population). Driving on roads in need of repair costs each Honolulu motorist an average of $701 annually in the form of accelerated vehicle depreciation, additional repair costs and increased fuel consumption and tire wear.[8] This is the fourth highest extra vehicle operating cost among large cities with a population of more than 500,000.[9]

Additional vehicle operating costs have been calculated in the Highway Development and Management Model (HDM), which is recognized by the U.S. Department of Transportation and more than 100 other countries as the definitive analysis of the impact of road conditions on vehicle operating costs. The HDM report is based on numerous studies that have measured the impact of various factors, including road conditions, on vehicle operating costs.[10]

The HDM study found that road deterioration increases ownership, repair, fuel and tire costs. The report found that deteriorated roads accelerate the pace of depreciation of vehicles and the need for repairs because the stress on the vehicle increases in proportion to the level of

roughness of the pavement surface. Similarly, tire wear and fuel consumption increase as roads deteriorate since there is less efficient transfer of power to the drive train and additional friction between the road and the tires.

TRIP's additional vehicle operating cost estimate is based on taking the average number of miles driven annually by a motorist, calculating current vehicle operating costs based on AAA's 2010 vehicle operating costs and then using the HDM model to estimate the additional vehicle operating costs paid by drivers as a result of substandard roads.[11] Additional research on the impact of road conditions on fuel consumption by the Texas Transportation Institute (TTI) is also factored into TRIP's vehicle operating cost methodology.

Bridge Conditions in Hawaii

Hawaii's bridges form key links in the state's highway system, providing communities and individuals access to employment, schools, shopping and medical facilities, and facilitating commerce and access for emergency vehicles.

In 2011, nearly half of Hawaii's bridges were rated as structurally deficient or functionally obsolete. This includes all bridges that are more than 20 feet in length and are maintained by state, local and federal agencies. Thirteen percent of Hawaii's bridges were rated as structurally deficient in 2011.[12] A bridge is structurally deficient if there is significant deterioration of the bridge deck, superstructure or substructure or if the bridge was designed to carry light loads. Bridges that are structurally deficient may be closed in some situations, but more often are posted for lower weight limits if their condition warrants such action. Deteriorated bridges can have a significant impact on daily life. Restrictions on vehicle weight may cause many vehicles – especially emergency vehicles, commercial trucks, school buses and

farm equipment – to use alternate routes to avoid posted bridges. Redirected trips also lengthen travel time, waste fuel and reduce the efficiency of the local economy.

Thirty-two percent of Hawaii's bridges were rated as functionally obsolete in 2011.[13] Bridges that are functionally obsolete no longer meet current highway design standards, often because of narrow lanes, inadequate clearances or poor alignment with the approaching roadway.

The service life of bridges can be extended by performing routine maintenance such as resurfacing decks, painting surfaces, insuring that a facility has good drainage and replacing deteriorating components. But, most bridges will eventually require more costly reconstruction or major rehabilitation to remain operable.

HDOT has identified the 25 structurally deficient bridges in the state that are most in need of repair or replacement. The bridges are listed below.

Chart 2. The 25 structurally deficient bridges that are most in need of repair or replacement.

Rank	Route	Location	Route or feature intersected	ADT	Year Built
1	560	KAUAI	WAIPA STRM	5,555	1912
2	560	KAUAI	WAIKOKO STRM	5,555	1913
3	560	KAUAI	WAIOLI STRM	6,265	1912
4	50	KAUAI	NAWILIWILI STR/LIHUE M	27,145	1936
5	99	OAHU	UP POAMOHO STRM	22,120	1936
6	50	KAUAI	WAHIAWA STRM	14,175	1936
7	0	MAUI	IAO STRM #59	3,000	1955
8	3080	MAUI	STRM(KAHANA-NUI #93)	3,000	1964
9	H1	OAHU	KAPALAMA CANAL	183,925	1938
10	31	MAUI	KULANIHAKOA DITCH #76	1,920	1911
11	7521	OAHU	PAUOA STRM	14,878	1932
12	93	OAHU	KAUPUNI STRM	26,970	1937
13	92	OAHU	NUUANU STRM (W.B)	70,400	1932
14	92	OAHU	KAPALAMA CANAL (E.B)	73,935	1949
15	83	OAHU	KAIPAPAU STRM	13,030	1932
16	270	HAWAII	NIULII STRM	5,760	1918
17	72	OAHU	IHIIHILAUAKEA STRM	9,800	1931
18	93	OAHU	MAIPALAOA STRM	33,735	1967
19	0	OAHU	WAALOA WY BR#2/MANOA STR	4,000	1965
20	0	OAHU	FERN ST/MAKIKI STRM	2,030	1931
21	83	OAHU	WAIPILOPILO STRM	13,030	1932
22	50	KAUAI	HANAPEPE RIVER	19,155	1938
23	0	OAHU	WAALOA BR#4/WAIAKEAKUA S	4,200	1963
24	6045	OAHU	KAELEPULU STREAM	12,657	1925
25	93	OAHU	UNMD STRM(MAKAHA #3)	6,565	1937

Source: Hawaii Department of Transportation response to TRIP survey.

HDOT projects that the current cost to replace or rehabilitate all structurally deficient bridges in the state totals $500 million.[14]

Traffic Congestion in Hawaii

Traffic congestion in Hawaii is a growing burden in key urban areas and threatens to impede the state's economic development. Congestion on Hawaii's urban highways is growing as a result of increases in vehicle travel and population.

In 2008, 45 percent of Hawaii's major urban highways were congested, carrying traffic volumes that result in significant rush hour delays.[15] Highways that carry high levels of traffic are also more vulnerable to experiencing lengthy traffic delays as a result of traffic accidents or other incidents. The statewide cost of lost time and wasted fuel due to traffic congestion totals $350 million each year.[16]

The average rush hour trip in the Honolulu metropolitan area takes approximately 18 percent longer to complete than during non-rush hour. Congestion related delays cost the average peak-hour driver in Honolulu $620 each year in lost time and wasted fuel.[17]

Traffic Safety in Hawaii

A total of 628 people were killed in motor vehicle crashes in Hawaii from 2006 through 2010, an average of 126 fatalities per year.[18]

Hawaii's traffic fatality rate was 1.13 fatalities per 100 million vehicle miles of travel in 2010, slightly higher than the national average of 1.11.[19]

Chart 3. Traffic fatalities in Hawaii from 2006 – 2010.

Year	*Fatalities*
2006	161
2007	138
2008	107
2009	109
2010	113
Total	**628**

Source: National Highway Traffic Safety Administration

The cost of serious traffic crashes in Hawaii in 2010, in which roadway design may have been a a contributing factor, was approximately $255 million.[20] The cost of serious crashes includes lost productivity, lost earnings, medical costs and emergency services.

In the Honolulu area, where there were 60 traffic fatalities in 2010, traffic crashes in which roadway design may have been a contributing factor cost each driver approximately $206 each year.[21]

Three major factors are associated with fatal vehicle accidents: driver behavior, vehicle characteristics and roadway design. It is estimated that roadway design may be a contributing factor in approximately one-third of all fatal and serious traffic crashes. Improved safety on Hawaii's roadways can be achieved through further improvements in vehicle safety; improvements in driver, pedestrian, and bicyclist behavior; and a variety of improvements in roadway safety features.

Where appropriate, the severity of serious traffic crashes could be reduced through roadway improvements such as adding turn lanes, removing or shielding obstacles, adding or improving medians, widening lanes, widening and paving shoulders, improving intersection layout, and providing better road markings and upgrading or installing traffic signals.

Roads with poor geometry, with insufficient clear distances, without turn lanes, inadequate shoulders for the posted speed limits, or poorly laid out intersections or interchanges, pose greater risks to motorists, pedestrians and bicyclists.

Importance of Transportation to Economic Growth

All of Hawaii's businesses are dependent on an efficient, safe, and modern transportation system that will foster continued business diversification and opportunity. Today's culture of business demands that an area have well-maintained and efficient roads, highways, bridges and public transit if it is to remain economically competitive. The advent of modern national and global communications and the impact of free trade in North America and elsewhere have resulted in a significant increase in freight movement. Consequently, the quality of a region's transportation system has become a key component in a business's ability to compete locally, nationally and internationally.

Businesses have responded to improved communications and the need to cut costs with a variety of innovations including just-in-time delivery, increased small package delivery, demand-side inventory management and by accepting customer orders through the Internet. The result of these changes has been a significant improvement in logistics efficiency as firms move from a push-style distribution system, which relies on large-scale warehousing of materials, to a pull-style distribution system, which relies on smaller, more strategic movement of goods. These improvements have made mobile inventories the norm, resulting in the nation's trucks literally becoming rolling warehouses.

Highways are vitally important to continued economic development in Hawaii. As the economy expands, creating more jobs and increasing consumer confidence, the demand for consumer and business products grows. In turn, manufacturers ship greater quantities of goods to market to meet this demand, a process that adds to truck traffic on the state's highways and major arterial roads.

Every year, $22 billion in goods are shipped from sites in Hawaii and another $32.4 billion in goods are shipped to sites in Hawaii.[22] Forty-seven percent of the goods shipped annually from sites in Hawaii are carried by trucks and another five percent are carried by parcel, U.S. Postal Service or courier services, which use trucks for part of their deliveries.[23]

A 2007 analysis by the Federal Highway Administration found that every $1 billion invested in highway construction would support approximately 27,800 jobs, including approximately 9,500 in the construction sector, approximately 4,300 jobs in industries supporting the construction sector, and approximately 14,000 other jobs induced in non-construction related sectors of the economy.[24]

The cost of road and bridge improvements are more than offset because of the reduction of user costs associated with driving on rough roads, the improvement in business productivity, the reduction in delays and the improvement in traffic safety. The Federal Highway Administration estimates that each dollar spent on road, highway and bridge improvements results in an average benefit of $5.20 in the form of reduced vehicle maintenance costs, reduced delays, reduced fuel consumption, improved safety, reduced road and bridge maintenance costs and reduced emissions as a result of improved traffic flow.[25]

The employment impact of highway construction is particularly important during periods of high unemployment. Hawaii's unemployment rate increased significantly from 3.0 percent in January 2008 to 6.5 percent in January 2012.[26]

Federal Funding for Hawaii's Surface Transportation System

The construction, repair and upkeep of Hawaii's roads, bridges, highways and public transit systems are paid for by local, state and federal governments. Roads and highways are maintained largely by state and local governments, and transit systems are operated largely by local transit agencies.

Significant federal funding for highways and transit is provided to both state and local governments. Federal funding for Hawaii's highways and bridges comes from the Federal Highway Trust Fund, under funding levels and formulas determined by Congress. Federal spending levels for highways and public transit are based on the current federal surface transportation program, the Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), which was approved by Congress in 2005. Following a series of short-term extensions since its original expiration date of Sept. 30, 2009, SAFETEA-LU is scheduled to expire on March 31, 2012.

As a result of this level of federal support, since 2000 Hawaii has been able to complete numerous projects on the state's highway system, rehabilitate deteriorated roadways and bridges, and expand transit systems and access to improve traffic safety, relieve traffic congestion and enhance economic development opportunities.

National Reports Highlight Need for Increased Transportation Investment

Two 2010 reports, one by the Treasury Department with the Council of Economic Advisers and the other by a bipartisan group of transportation experts, found that the U.S. is falling far behind internationally in providing a modern transportation system and will need to adopt a more ambitious and focused transportation program to maintain the nation's standard of living. The reports call for increased investment to relieve traffic congestion, improve freight and intermodal access, improve road and bridge conditions and reduce emissions.

"An Economic Analysis of Infrastructure Investment" (The Treasury report) was prepared by the U.S. Department of the Treasury with the Council of Economic Advisers.

The report, *"Well Within Reach: America's New Transportation Agenda"* (The Miller report) was prepared by a group of the nation's top transportation policy experts chaired by former U.S. Secretaries of Transportation, Samuel Skinner and Norman Mineta. The group was assembled by the Miller Center at the University of Virginia to develop solutions for the funding and planning challenges that confront the nation's transportation system.

The reports concluded that now is an optimal time to invest in infrastructure because of reduced costs due to the economic downturn. The report also found that providing adequate resources to modernize the nation's transportation system will require increased use of innovative funding tools including vehicle-miles-traveled fees, public-private partnerships and capital budgeting.

The Miller report found that the nation faces an annual funding shortfall between $134 and $194 billion to maintain conditions and traffic congestion levels on its transportation system.

The report also found an annual funding shortfall to improve conditions of America's transportation system and reduce traffic congestion from between $189 and $262 billion.[27]

The Treasury report found that U.S. infrastructure spending as a percentage of gross domestic product (GDP) has fallen by 50 percent and now accounts for two percent of the nation's GDP. In contrast, China spends about nine percent of its GDP on infrastructure and Europe about five percent.[28]

The Treasury report found that now is an optimal time to invest in transportation infrastructure because well-designed projects can provide significant, long-term economic benefits, because significant needs exist and construction and other costs associated with infrastructure projects are especially low due to high unemployment and a high level of underutilized resources. The report found that the unemployment rate among those likely to gain employment from infrastructure investment is currently over 15 percent.[29]

The reports included a number of key recommendations for the nation's transportation program to insure that it keeps America's roads, skies, rails and waterways well-funded, in good repair, and functioning with optimal efficiency and safety.

The following are some of the key recommendations from the Miller report.

- ✓ Improved planning and increased investment in state-of-the-art freight transportation facilities and systems would improve the efficiency of the supply chain, improve business efficiency and enhance economic competitiveness. It was recommended that an integrated approach to transportation planning be adopted that includes freight and goods movement and stresses intermodal connectivity.[30]
- ✓ To insure that investments in infrastructure build a foundation for prosperity, the Miller report recommended that a priority be placed on funding projects that provide the greatest returns in terms of future U.S. competitiveness, economic growth and employment.[31]

- ✓ Notwithstanding the recent economic downturn, traffic congestion continues to be a significant burden to the public and businesses. The Miller report recommends an increased emphasis on urban congestion relief, including adding additional capacity roadway and transit capacity, making the existing system work more efficiently and adopting regional policies that may reduce some travel demand.[32]
- ✓ Just as the nation's roadways are slowed by congestion, the process of planning, winning approval for, and implementing transportation improvements can by stymied by gridlock among the many federal, state and local agencies involved. The Miller report recommended improved delivery of transportation projects by reforming the project planning, permitting and review process to speed actual implementation.[33]

There is very little direct private investment in our nation's highway and transit systems due to the current method of funding infrastructure. The Treasury report also recommended the establishment of a National Infrastructure Bank (NIB) that would create conditions for greater private sector co-investment in infrastructure. The NIB would also perform rigorous analysis to identify projects with the greatest possible societal and economic benefits.

The Miller report called for the adoption of a federal capital budget that would recognize that transportation expenditures are an investment and that takes into account future returns on those investments. An increased investment in transportation would actually save the public money by reducing delays, vehicle maintenance costs, traffic crashes and vehicle emissions, the Miller report found.

Conclusion

Hawaii's network of roads and bridges provides the lifeline of the Aloha State's economy. Today, Hawaii's surface transportation system is under multiple pressures from aging roads and bridges and increasing traffic congestion. As it looks to enhance and build a thriving, growing and dynamic state, it will be essential that Hawaii is able to provide a 21st Century network of roads, highways, bridges and public transit that can safely and efficiently accommodate the mobility demands of a modern society.

Hawaii has an immediate need to move forward with numerous projects that would repair, rehabilitate and expand the state's transportation system, but without a substantial level of federal, state and local funding, many vital projects will remain unfunded.

As the nation looks to rebound from the recent economic downturn, the U.S. will need to modernize its surface transportation system, improve the physical condition of its transportation network and enhance the system's ability to provide efficient and reliable mobility for motorists and businesses. Making needed improvements to Hawaii's roads, highways, bridges and transit could provide a significant boost to the state's economy by creating jobs in the short term and stimulating long-term economic growth as a result of enhanced mobility and access.

###

Endnotes

[1] U.S. Census Bureau annual population estimate.
[2] Hawaii Department of Business, Economic Development and Tourism.
[3] TRIP analysis of data from the U.S. Bureau of Economic Analysis. The nation's Gross Domestic Product has been adjusted for inflation based on the Consumer Price Index.
[4] U.S. Department of Transportation – Federal Highway Administration: Highway Statistics 1990 and Federal Highway Administration.
[5] TRIP calculation based on Census and FHWA data.
[6] Hawaii Department of Transportation response to TRIP survey.
[7] Selecting a Preventative Maintenance Treatment for Flexible Pavements. R. Hicks, J. Moulthrop, Transportation Research Board. 1999. Figure 1.
[8] Hold the Wheel Steady: America's Roughest Roads and Strategies to Make our Pavements Smoother. TRIP, September 2010.
[9] Ibid.
[10] Highway Development and Management: Volume Seven. Modeling Road User and Environmental Effects in HDM-4. C. Bennett, I. Greenwood. 2000.
[11] Your Driving Costs. AAA. 2010.
[12] USDOT Federal Highway Administration National Bridge Inventory 2011.
[13] Ibid.
[14] Hawaii Department of Transportation response to TRIP survey.
[15] TRIP analysis of FHWA data. Highway Statistics 2008, Table HM-61. Interstate and Other Freeways and Expressways with a volume service ratio above 0.70, which is the standard for mild congestion, are considered congested.
[16] TRIP estimate based on Texas Transportation Institute methodology.
[17] Texas Transportation Institute. 2010 Urban Mobility Report.
[18] National Highway Traffic Safety Administration data.
[19] Ibid.
[20] TRIP estimates based on National Highway Traffic Safety Administration (NHTSA) data.
[21] Ibid.
[22] Bureau of Transportation Statistics, USDOT. 2007 Commodity Flow Survey, State Summaries.
[23] Ibid.
[24] Federal Highway Administration, 2008. Employment Impacts of Highway Infrastructure Investment.
[25] FHWA estimate based on its analysis of 2006 data. For more information on FHWA's cost-benefit analysis of highway investment, see the 2008 Status of the Nation's Highways, Bridges and Transit: Conditions and Performance.
[26] Bureau of Labor Statistics. Local unemployment statistics.

[27] Miller Center of Public Affairs (2010). "Well Within Reach, America's Transportation Agenda." P. 28.
[28] Department of the Treasury with the Council of Economic Advisors (2010). "An Economic Analysis of Infrastructure Investment." p. 13.
[29] Ibid. p. 2.
[30] Miller Center of Public Affairs (2010). "Well Within Reach, America's Transportation Agenda." P. 38.
[31] Ibid. p. 34.
[32] Miller Center of Public Affairs (2010). "Well Within Reach, America's Transportation Agenda." P. 40.

[33] Ibid. p. 45.

FINTestimony

From: mailinglist@capitol.hawaii.gov
Sent: Monday, April 02, 2012 9:28 AM
To: FINTestimony
Cc: Thorneabbott@yahoo.com
Subject: Testimony for SB3010 on 4/2/2012 5:00:00 PM

Testimony for FIN 4/2/2012 5:00:00 PM SB3010

Conference room: 308
Testifier position: Oppose
Testifier will be present: No
Submitted by: Thorne Abbott
Organization: Individual
E-mail: Thorneabbott@yahoo.com
Submitted on: 4/2/2012

Comments:
I strongly oppose! Historic bridges along Maui's Hana Highway are a KNOWN tourist draw and provide Maui County with federally-subsidized advertising and NATIONAL recognition. They must NOT be destroyed in favor of un-reviewed bridge designs that don't consider local needs, natural resources, or historic interests. DOT Highways Division acknowledges that it can only complete 1-3 bridges a year. The so-called 'delay' created by obtaining proper community, environmental, coastal and historic preservation input and review is a myth. Numerous DOT projects that obtained SMA and Environmental Review within 6 to 9 months four years ago still have yet to be started. What is the true delay? Apparently, evaluating the consequences of these projects impact on the environment, culture, and natural resources did not create a 4 year delay.
Further, the state and federal permitting reviews can be conducted concurrently without duplication or redundancy. One builds and serves the other. However, retaining only federal review excludes the local community from participating while obscuring their ability to be aware of bridge replacement projects. Moreover, DOT is expending locally generated taxes without knowledge or input from the community most affected by these actions. If they are so badly needed, clearly the community that uses them the most will respond in great favor. Environmental, historic, and coastal resource review does not delay projects, it makes them better because it incorporates locally known, site-specific information and incorporates federal financial incentives that capitalize on the unique character of these rare resources. Asking the community what they want and need is not a source of delay it is a source of support and improved project design and implementation. Destroying these bridges, through modification or replacement which negates their heritage value without community input and without considering the resultant loss of federal money gained from their preservation is imprudent, short-sighted and a disservice to the tax paying, voting people of the Hana region, as well as Maui's citizenry.

Please defer this bill!

FINTestimony

m: mailinglist@capitol.hawaii.gov
nt: Friday, March 30, 2012 4:47 PM
To: FINTestimony
Cc: inunyabus@gmail.com
Subject: Testimony for SB3010 on 4/2/2012 5:00:00 PM

Testimony for FIN 4/2/2012 5:00:00 PM SB3010

Conference room: 308
Testifier position: Oppose
Testifier will be present: No
Submitted by: E. Dunbar
Organization: Individual
E-mail: inunyabus@gmail.com
Submitted on: 3/30/2012

Comments:
SB3010

I testify in strong opposition to any exemption from the environmental protection requirements on any projects in the State of Hawaii.

This is not a door you want to open. First it's a bridge, then it's a bridge connected to a development and on and on for the purpose of loop-holing environmental protection laws.

)'t weaken Hawaii's laws. Strengthen Hawaii's laws for protection by sending some strong messages to these types of bills that are worming their way through the fabric of Hawaii's essence.

All testimony in favor of these types of DESTRUCTIVE legislation are from contractors, out of state firms, and construction workers that obviously don't put a high price on Hawaii's intrinsic value, only their fast term cash. We can survive here without that mentality.

For decades the defense of development has been "it will create jobs" and? are we not in a job crisis even with all these pleas for construction having been granted?

Enough already. Hawaii is far too important for even a 'little' exemption because it will exponentially affect other aspects of the laws.